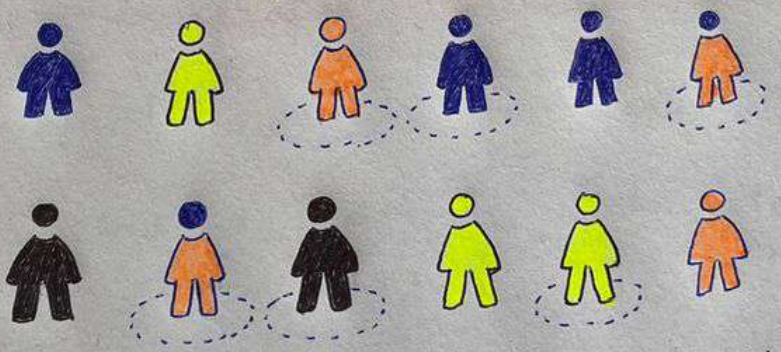
Prabability sampling methods.

— Prabability sampling means every member of the population has a chance of being selected as sample. It's mainly used in quantitative research.

- **Simple random sampling.**

Each member of population has equal chance of being selected. Sample frame include whole population.

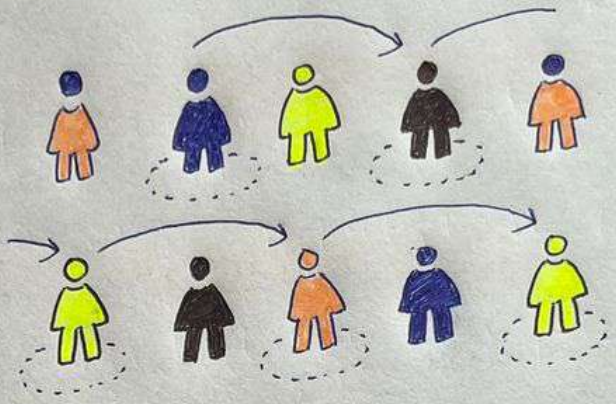


Simple random sampling.

- **Systematic sampling.**

It's similar to simple random sampling, Every member of the population is listed with a number, Instead of random selection sample data is collected at regular

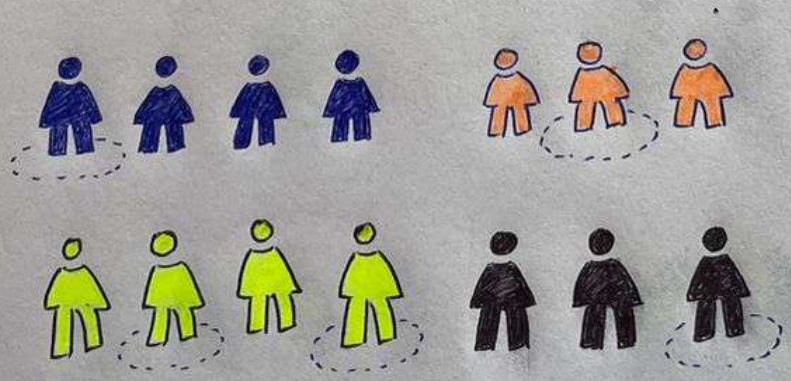
interval.



Systematic sampling.

- **Stratified sampling.**

It involves dividing the population into sub populations that may differ in important ways. It allows us to draw more precise conclusions by ensuring that every sub-group is properly represented in sample. we devide population based on Gender, Age, Income bracket, Jobs etc.

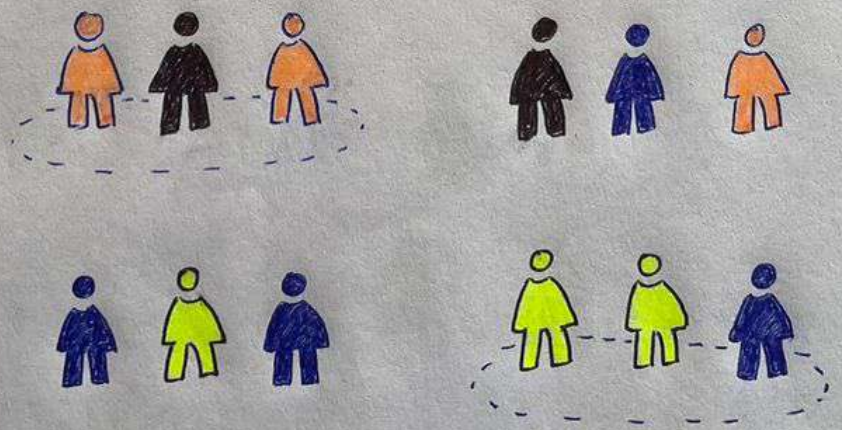


Stratified sampling.

- Cluster sampling.

Involves dividing the population into Sub-groups, each divided sub groups should have similar characteristic to the whole sample. Instead of sampling individuals from each sub group, you randomly select entire sub group.

Ex- let's we need to check quality of a dish at a Restaurant chain available across India, All cook are trained same at same place and ingredients are also same. So we will randomly visit 3/4 of place outlet and will collect data. These 3/4 outlets are our clusters.



Cluster sampling.

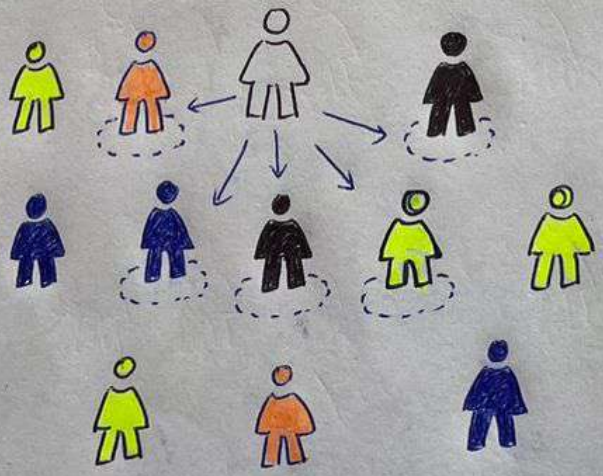
Non - Probability sampling methods.

- Individuals are selected based on non-random criteria and every individuals won't have chance of being selected.

- **Convenience sampling:**

Includes the individuals who happens to be most accessible to the researcher.

Ex - let same one is researching about a topic and use to ask his fellow students after class to fill form of survey. It's easy and convinient way to gather data. But we collect data from same class so it might not represent whole school view on topic.

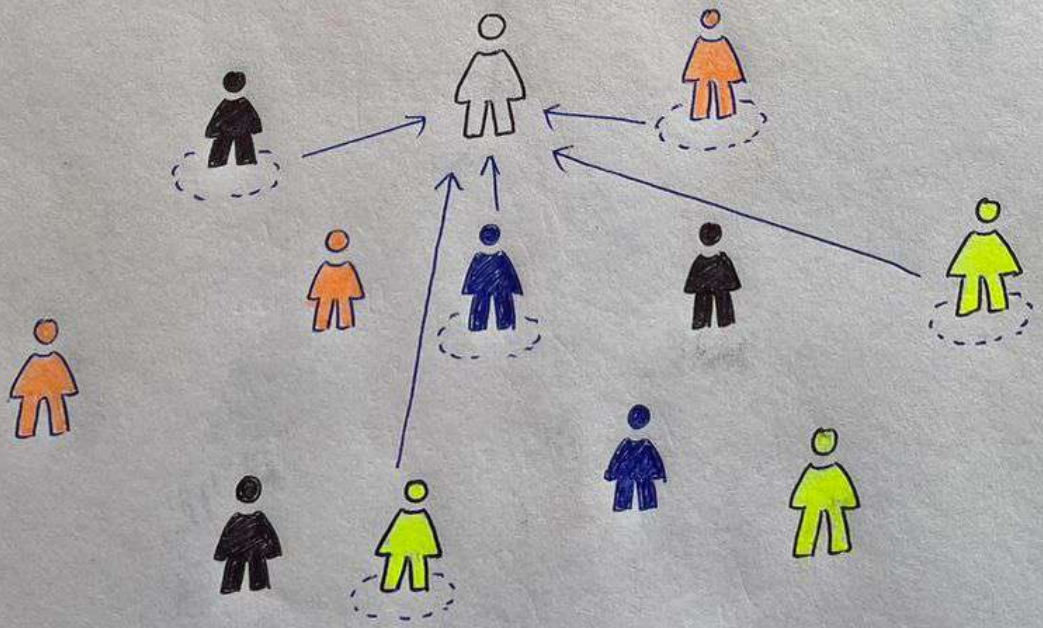


Convenience sampling.

- **Voluntary response sampling.**

It's mainly based on **ease of access**. Instead of researcher choosing participants and contacting them **people volunteer themselves**.

Ex - one run online survey whoever will open certain page but only those will participate who are intrested. One who participate because they might be intrested in particular survey. So the technique can't provide broad representation of population data.

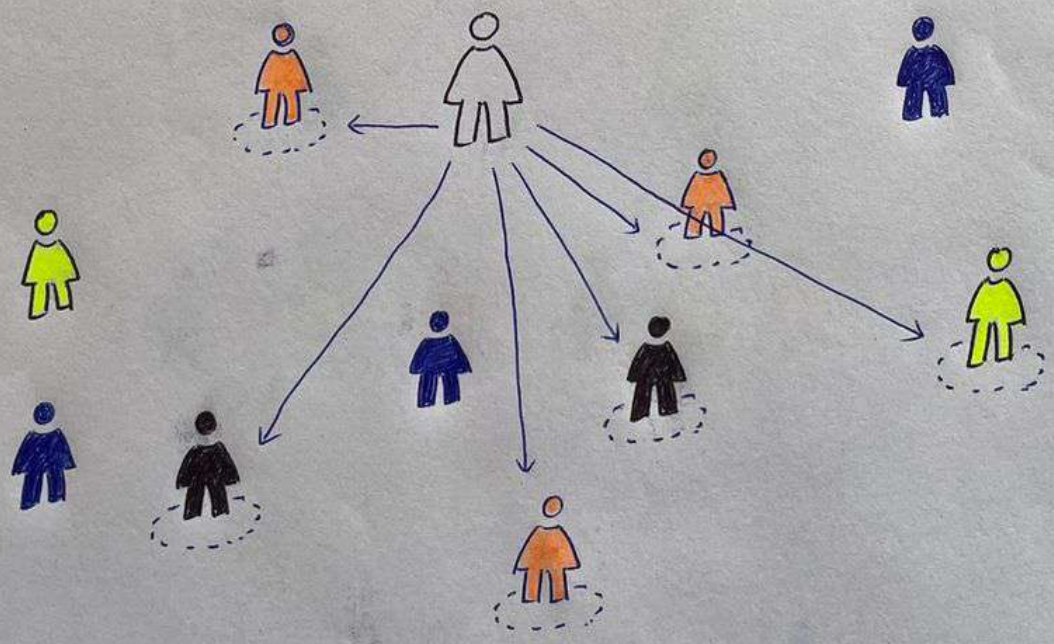


Voluntary response sampling.

- **Purposive sampling.**

Involves the researcher using their expertise to select a sample that is most useful to the purpose of the research. It's often used in qualitative research, where researcher wants to gain detailed knowledge about a specific phenomenon rather than making statical inferences.

Ex- let's we want to build product specific to disabled peaples, then we will collect sample data with there problems from disabled peaples.



Purposive sampling.

- **Snowball sampling.**

It's used when population is hard to access, it's used to recruit participants via other participants.

Ex - let we want information on Heart disease patient data having transplant, But we have no information and can't keep asking random population. So will contact people having lead in hospitals to provide us data.